

LPDES PERMIT NO. LA0005924, AI No. 38806

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. **Company/Facility Name:** DuPont Performance Elastomers, L.L.C.
Pontchartrain Site
560 Highway 44
LaPlace, Louisiana 70068
- II. **Issuing Office:** Louisiana Department of Environmental Quality
(LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
- III. **Prepared By:** Sonja Loyd
Water Permits Division
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Date Prepared: January 4, 2007

IV. **Permit Action/Status:**

A. Reason For Permit Action:

Proposed reissuance of an expired Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46*.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401 and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301.F, 4901, and 4903.

- B. **LPDES permit:** Effective date - December 1, 2001
Minor Modification date - September 1, 2003
Major Modification date - March 15, 2004
Minor Modification date - July 1, 2005
Expiration date - November 30, 2006

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- C. Date Application Received: The permit renewal application was received on June 1, 2006. Supplemental information needed to complete the permitting process was received on September 12, 2006, September 28, 2006, April 19, 2007, May 7, 2007.

V. Facility Information:

- A. Location - 560 Highway 44 in LaPlace, St. John the Baptist Parish (Latitude 30°03'14", Longitude 90°31'29")
- B. Applicant Activity - According to the application, DuPont Performance Elastomers, L.L.C., Pontchartrain Site, is a rubber and organic chemical manufacturing facility. The products manufactured at this facility include the following: chloroprene, neoprene, diamines, and hydrochloric acid. The facility is also proposing to manufacture 2,3-dichlorobutadiene-1,3 in the ACR Unit which will be located in the Chloroprene Unit. Operations are expected to begin in April 2007. Process wastewaters and process area storm water runoff from the Chloroprene, ACR, HCl, and Organic Diamines/Specialty Chemicals manufacturing facilities are deepwell injected.
- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401 and 405-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Rubber Manufacturing Point
 Source Category
 (Emulsion Crumb Rubber Subcategory)

Reference

40 CFR 428, Subpart B

Other sources of technology based limits:

Current LPDES permit (effective December 1, 2001)
 Best Professional Judgment

- D. Fee Rate -
1. Fee Rating Facility Type: Major
 2. Complexity Type: VI
 3. Wastewater Type: II
 4. SIC code: 2822 and 2869
- E. Continuous Facility Effluent Flow - 57.3 MGD (30-Day Maximum)

VI. Receiving Waters: Mississippi River (Outfall 001) and Lake Maurepas (Outfalls 002 - 007)

1. TSS (15%), mg/L: 26.6
2. Average Hardness, mg/L CaCO₃: 149.7
3. Critical Flow, cfs: 141,955
4. Mixing Zone Fraction: 0.333
5. Harmonic Mean Flow, cfs: 366,748

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6. River Basins: Mississippi River, Subsegment No. 070301 and Lake Pontchartrain, Subsegment No. 040602
7. Designated Uses:

Subsegment No. 070301

The designated uses are primary contact recreation, secondary contact recreation, fish and wildlife propagation, and drinking water supply.

Subsegment No. 040602

The designated uses are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Information based on the following: LAC 33:IX Chapter 11 and memorandum from Brian Baker to Sonja Loyd dated August 24, 2006. Hardness and 15% TSS data were taken from ambient monitoring station no. 321 located in the Mississippi River south of Lutchet, Louisiana. The critical and harmonic mean flows were taken from the permittee's February 1, 2000 Fact Sheet.

VII. Outfall Information:

Outfall 001

- A. Type of wastewater - Combined discharge of once-through non-contact cooling water (Utility Area, Chloroprene Area, HCl Area, Diamines Area, and Neoprene Area), utility water [settling basin solids clean-out (dewatering of solids), boiler blowdown, Butadiene Sphere clean-out, stormwater/tank clean-out (Neoprene), and Utility Area bypass] and previously monitored treated process and laboratory wastewaters and treated sanitary wastewater (Internal Outfall 101); hydrostatic test wastewater (Internal Outfall 102); clarifier blowdown (Internal Outfall 201); and non-process area stormwater runoff, utility wastewater, and area washdown water (Internal Outfalls 401 and 501)
- B. Location - At the point of discharge of the final combined effluent prior to combining with other waters (Latitude 30°03'03", Longitude 90°31'07")
- C. Treatment - None
- D. Flow - Continuous, 57.3 MGD (30-Day Maximum)
- E. Receiving waters - Mississippi River
- F. Basin and subsegment - Mississippi River, Subsegment No. 070301

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Internal Outfall 101

- A. Type of wastewater - treated process and laboratory wastewaters and treated sanitary wastewater
- B. Location - At the point of discharge from the wastewater treatment plant prior to combining with the effluent at Outfall 001 (Latitude 30°03'34", Longitude 90°31'32")
- C. Treatment - Surge tank and Aeration tank (facilitate biological treatment), Activated sludge, Flocculation, Sedimentation, Aerobic Digestion, and Belt Filtration. The sanitary wastewater flows to a treatment system where it is disinfected by Ultra-Violet light prior to combining with the wastestreams discharging from this internal outfall.
- D. Flow - Continuous, 0.577 (Long Term Average)
- E. Receiving waters - Mississippi River
- F. Basin and Subsegment - Mississippi River, Subsegment No. 070301

Internal Outfall 102

- A. Type of wastewater - hydrostatic test wastewater
- B. Location - At the point of discharge from the vessel or pipeline being tested prior to combining with the effluent at Outfall 001 or 002.

[NOTE: This wastewater may be discharged at two points along the plant ditch system which ultimately discharges through Outfall 002. At this time, the permittee has not constructed a pipeline system which would allow this discharge to flow to Outfall 001. However, the permittee has requested that this option be retained in the permit.]
- C. Treatment - None
- D. Flow - De minimis
- E. Receiving waters - Mississippi River (Outfall 001) and Lake Maurepas via local drainage (Outfall 002)
- F. Basin and Subsegments - Mississippi River, Subsegment No. 070301 (Outfall 001) and Lake Pontchartrain, Subsegment No. 040602 (Outfall 002)

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Internal Outfall 201

- A. Type of wastewater - clarifier blowdown
- B. Location - At the point of discharge of clarifier blowdown from the intake water treatment plant prior to combining with the effluent at Outfall 001 (Latitude 30°03'19", Longitude 90°31'29")
- C. Treatment - None
- D. Flow - Continuous, 0.0144 MGD (Long Term Average)
- E. Receiving waters - Mississippi River
- F. Basin and Subsegment - Mississippi River, Subsegment No. 070301

Internal Outfall 401

- A. Type of wastewater - non-process area stormwater, utility wastewater, and area washdown water from the Utility Area (comprised of the boiler bay area, water treatment area, and the area where the decommissioned incinerator is located)
- B. Location - At the point of discharge located at the Utility Area prior to combining with the effluent at Outfall 001 (Latitude 30°03'20", Longitude 90°31'30")
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Mississippi River
- F. Basin and Subsegment - Mississippi River, Subsegment No. 070301

Internal Outfall 501

- A. Type of wastewater - non-process area stormwater runoff, utility wastewater, and area washdown water from the Diamines Tank Farm (comprised of two tank farm areas where three bulk chemical storage tanks are located)
- B. Location - At the point of discharge located at the Diamines Tank Farm Area prior to combining with the effluent at Outfall 001 (Latitude 30°03'23", Longitude 90°31'24")
- C. Treatment - None
- D. Flow - Intermittent

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- E. Receiving waters - Mississippi River
- F. Basin and Subsegment - Mississippi River, Subsegment No. 070301

Outfall 002

- A. Type of wastewater - Non-process area stormwater runoff, steam condensate, freeze protection water bleeds, fire water treatment wastewater, and previously monitored hydrostatic test wastewater (Internal Outfall 102)
- B. Location - At the point of discharge from the control structure located at the northeast corner of the facility's property prior to combining with other waters (Latitude 30°03'43", Longitude 90°31'24")
- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Lake Maurepas via local drainage
- F. Basin and Subsegment - Lake Pontchartrain, Subsegment No. 040602

Outfalls 003, 004, 005, 006, and 007

- A. Type of wastewater - non-process area stormwater runoff
- B. Location - At the point of discharge from the following locations:

 Outfall 003 - At the point of discharge from the north end of the closed non-hazardous solid waste landfill which is located at the western portion of the facility prior to combining with other waters (Latitude 30°03'37", Longitude 90°32'01")

 Outfall 004 - At the point of discharge from the northeast end of the closed and covered non-hazardous wastewater treatment sludge landfill prior to combining with other waters (Latitude 30°03'42", Longitude 90°31'42")

 Outfall 005 - At the point of discharge from the railroad company right-of-way located at the north end of the facility's property prior to combining with other waters (Latitude 30°03'42", Longitude 90°31'55")

 Outfall 006 - At the point of discharge from the west side of the north access road prior to combining with other waters (Latitude 30°04'34", Longitude 90°32'16")

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Outfall 007 - At the point of discharge from the east side of the north access road prior to combining with other waters (Latitude 30°04'34", Longitude 90°32'14")

- C. Treatment - None
- D. Flow - Intermittent
- E. Receiving waters - Lake Maurepas via local drainage
- F. Basin and Subsegment - Lake Pontchartrain, Subsegment No. 040602

VIII. Current Effluent Limits:

See Appendix D - LPDES permit limits

IX. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current LPDES Permit:

- A. On or about May 18, 2005, this office was notified by letter (dated May 16, 2005) that the permittee's name was changed from DuPont Dow Elastomers, L.L.C. to DuPont Performance Elastomers, L.L.C., effective July 1, 2005. On or about June 21, 2005, this Office issued a permit modification to reflect the permittee's name change.
- B. Outfall 001

The description of wastestreams has been modified to include stormwater/tank clean-out (Neoprene) as a utility wastewater.

The Whole Effluent Toxicity (WET) testing dilution series for Freshwater Acute Biomonitoring at Outfall 001 was changed to reflect 0.79%, 1.1%, 1.4%, 1.9%, and 2.5% (with 1.9% defined as the critical dilution). The monitoring frequency shall be once per quarter using a 24-Hour Composite sample. This revision is based on a recommendation from the Technical Support Section in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. The proposed biomonitoring requirements were developed in accordance with EPA Region 6 policy and biomonitoring protocol which is being established in all major permits as a part of the permit reissuance process. See Appendix C for Biomonitoring Recommendation.

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C. Internal Outfall 101

The daily maximum and monthly average technology-based mass limits for BOD₅, TSS, Oil and Grease, and COD have been revised based on the permittee's current production rate as reported in the 2006 application.

D. Internal Outfall 102

The limits and monitoring requirements for pH have been removed from this internal outfall since limits and monitoring requirements for pH have been established at Outfalls 001 and 002.

E. Internal Outfalls 401 and 501

The limits and monitoring requirements for pH have been removed from these internal outfalls since limits and monitoring requirements for pH have been established at Outfall 001.

F. Outfalls 006 and 007

Outfall 006 has been designated as a representative outfall for Outfall 007 in the draft permit based on the discharges having substantially identical effluents. Therefore, the permittee may test the effluent of Outfall 006 (the designated representative outfall) and report that the quantitative data also applies to Outfall 007. Discharge Monitoring Report (DMR) submittal using the representative sample data is required for Outfall 007.

G. The facility discharges to a Water Quality Act 303(d) stream. Therefore, a reopener clause has been added to Part II of the permit in the event that the permit requires reassessment regarding 303(d) status resulting in incorporation of the results of any Total Maximum Daily Load (TMDL) allocation for the receiving water body.

H. Updated Part II conditions for stormwater discharges associated with industrial activities have been established in the draft permit.

I. The provision in the Part II conditions that required submittal of DMRs to the Southeast Regional Office has been removed from the permit. All DMRs sent to the Office of Environmental Compliance/Permit Compliance Unit are scanned into the Electronic Document Management System which is accessible to all DEQ personnel.

X. **Permit Limit Rationale:**

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and

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conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII.

1. Outfall 001 - Combined discharge of once-through non-contact cooling water (Utility Area, Chloroprene Area, HCl Area, Diamines Area, and Neoprene Area), utility water [settling basin solids clean-out (dewatering of solids), boiler blowdown, Butadiene Sphere clean-out, stormwater/tank clean-out (Neoprene), and Utility Area bypass] and previously monitored treated process and laboratory wastewaters and treated sanitary wastewater (Internal Outfall 101); hydrostatic test wastewater (Internal Outfall 102); clarifier blowdown (Internal Outfall 201); and non-process area stormwater runoff, utility wastewater, and area washdown water (Internal Outfalls 401 and 501)

Utility wastewaters including, but not limited to once-through non-contact cooling water and boiler blowdown shall receive limits and monitoring requirements consistent with the current LPDES permit. [NOTE: The utility wastewaters represent 99% of the overall flow from this outfall.]

Flow (MGD)- Report, daily maximum and monthly average

TOC - 50 mg/L, daily maximum

pH - 6.0 - 9.0 Standard Units, subject to the excursion provisions for continuously monitored pH

Biomonitoring - See Section X.D

2. Internal Outfall 101 - Treated process and laboratory wastewaters and treated sanitary wastewater

Flow (MGD) - Report, daily maximum and monthly average

BOD₅ (*1)

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TSS (*1)
 Oil & Grease (*1)
 COD (*1)
 Chlorobutadiene (*1)
 Fecal Coliform (COL/100 ml)- 400 and 200, daily maximum and monthly average

The permittee is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

<u>Manufacturing Operation</u>	<u>Guideline</u>
Rubber Manufacturing Point	40 CFR 428, Subpart B
Point Source Category	
(Emulsion Crumb Rubber Subcategory)	

40 CFR 428.22 (BPT) - This guideline is applicable for the conventional pollutants.

40 CFR 428.23 (BAT) - This guideline is applicable for the non-conventional pollutant.

Production Rate: 340,000 lbs/day
 Process flow: 0.51984 MGD (Long Term Average)

(*1) Calculations, results, and documentation for the technology-based mass limits for BOD₅, TSS, Oil and Grease, COD, and Chlorobutadiene are found in Appendices A-1 and A-2. See below for site-specific considerations.

Site-Specific Considerations

Chlorobutadiene Limits

The mass limits for 2-chlorobutadiene-1,3 (chlorobutadiene) or chloroprene, a neoprene reactant, were established by BPJ in the current LPDES permit using the concentration guideline limits for 1,3-dichloropropylene and 1,2-dichloropropane based on 40 CFR 414, Organic Chemicals, Plastics, and Synthetic Fibers (Subpart J). These limits were established since chlorobutadiene is known to have a similar response to physical and biological treatment as the above guideline pollutants. Therefore, the methodology used to calculate the mass limits will be retained at this outfall using a daily maximum and monthly average of 800 µg/L and 200 µg/L, respectively, after rounding up.

Sanitary Wastewaters

Sanitary wastewater was included as a part of the process wastewater stream and receives a BPJ allocation for BOD₅ and TSS loadings to the process wastewaters in Appendix A-1. Daily maximum and monthly average concentration limits for fecal coliform will be retained from the current LPDES permit. The requirement allowing the facility to collect the fecal

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coliform sample immediately after the sanitary wastewater treatment plant will also be retained in the draft permit.

3. Internal Outfall 102 - Hydrostatic test wastewater

Hydrostatic test wastewater shall receive limitations and monitoring requirements consistent with the current LPDES permit.

Flow (MGD) - Report, daily maximum
TSS - 90 mg/L, daily maximum
Oil and Grease - 15 mg/L, daily maximum
TOC - 50 mg/L, daily maximum
Benzene - 50 µg/L, daily maximum
Total BTEX - 250 µg/L, daily maximum
Total Lead - 50 µg/L, daily maximum

4. Internal Outfall 201 - Clarifier blowdown

Clarifier blowdown shall receive monitoring requirements consistent with the current LPDES permit.

Flow (MGD)- Report, monthly average and daily maximum
Coagulants - Inventory calculation

5. Internal Outfalls 401 and 501 - Non-process area stormwater, utility wastewater, and area washdown

This combined discharge of low potential contaminated wastewaters shall receive limits and monitoring requirements consistent with the current LPDES permit.

Flow (MGD)- Report, daily maximum and monthly average
TOC - 50 mg/L, daily maximum
Oil and Grease - 15 mg/L, daily maximum
Total Zinc - Report (mg/L), daily maximum
Total Phenols (*1) - Report (mg/L), daily maximum
Toluene (*1) - Report (mg/L), daily maximum

(*1) These parameters are applicable only at Internal Outfall 401.

6. Outfall 002 - Non-process area stormwater, steam condensate, freeze protection water bleeds, fire water treatment wastewater, and previously monitored hydrostatic test wastewater (Internal Outfall 102)

This combined discharge of low potential contaminated wastewaters shall receive limitations and monitoring requirements consistent with the current LPDES permit.

Flow (MGD)- Report, monthly average and daily maximum
TOC - 50 mg/L, daily maximum

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Oil and Grease - 15 mg/L, daily maximum
pH - 6.0 - 9.0 Standard Units

7. Outfalls 003, 004, 005, 006, and 007 - Non-process area stormwater

Non-process area stormwater shall receive limitations and monitoring requirements consistent with the current LPDES permit.

Flow (MGD)- Report, monthly average and daily maximum
TOC - 50 mg/L, daily maximum
Oil and Grease - 15 mg/L, daily maximum
pH - 6.0 - 9.0 Standard Units

Site-Specific Considerations

Outfall 006 has been designated as a representative outfall for Outfall 007. The permittee may test the effluent at Outfall 006 and report that the quantitative data also applies to the substantially identical outfall (Outfall 007). For this to be permissible, the permittee must include the following information in the facility's pollution prevention plan: location of the outfalls; why the outfalls are expected to discharge substantially identical effluents; estimates of the size of the drainage area (in square feet) for each of the outfalls; and an estimate of the runoff coefficient of the drainage areas (low: under 40%; medium: 40% to 65%; and high: above 65%).

Storm Water Pollution Prevention Plan (SWP3) Requirement

In accordance with LAC 33:IX.2707.I.3 and 4 [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all stormwater discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference into the SWP3. Examples of these type of plans include, but are not limited to: Spill Prevention Control and Countermeasure Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including BMP controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined at LAC 33:IX.2511.B.14 [(40 CFR 122.26 (b) (14))].

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Analytical data from the 2006 permit application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

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In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendices B-1 and B-2.

The following pollutants received water quality based effluent limits:

None

Minimum quantification levels (MQL's) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. They are also listed in Part II of the permit.

TMDL Waterbodies

Subsegment No. 070301 of the Mississippi River Basin is not listed on the 2004 Final Integrated 303(d) List as being impaired.

Subsegment No. 040602 of the Lake Pontchartrain Basin is listed on the 2004 Final Integrated 303(d) List as being impaired for pathogen indicators and non-native aquatic plants. To date, no Total Maximum Daily Loading (TMDL) assessments have been completed for this subsegment. The TMDL Assessments for this subsegment are scheduled to be completed by 2011-2012. Based on an evaluation of the effluent discharges, it was determined that the permittee has no potential to discharge pathogen indicators and/or constituents that would cause non-native aquatic plants to thrive.

A reopener clause has been placed in Part II of the permit to allow for more stringent or additional limitations or requirements to be placed in the permit, if needed, as a result of the TMDL.

D. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols. See Appendix C for the Biomonitoring Recommendation.

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Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall 001 are as follows:

TOXICITY TESTS

FREQUENCY

Acute static renewal 48-hour
definitive toxicity test
using Daphnia pulex

1/quarter

Acute static renewal 48-hour
definitive toxicity test
using fathead minnow (Pimephales
promelas)

1/quarter

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

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Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. These additional effluent concentrations shall be 0.79%, 1.1%, 1.4%, 1.9%, and 2.5%. The low-flow effluent concentration (critical dilution) is defined as 1.9% effluent.

E. MONITORING FREQUENCIES

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(i)]. The following section(s) explain the rationale for the monitoring frequencies stated in the draft permit.

1. Outfall 001 - Combined discharge of once-through non-contact cooling water (Utility Area, Chloroprene Area, HCl Area, Diamines Area, and Neoprene Area), utility water [settling basin solids clean-out (dewatering of solids), boiler blowdown, Butadiene Sphere clean-out, stormwater/tank clean-out (Neoprene), and Utility Area bypass] and previously monitored treated process and laboratory wastewaters and treated sanitary wastewater (Internal Outfall 101); hydrostatic test wastewater (Internal Outfall 102); clarifier blowdown (Internal Outfall 201); and non-process area stormwater runoff, utility wastewater, and area washdown water (Internal Outfalls 401 and 501)

Flow and pH shall be monitored continuously using a recorder. TOC shall be monitored once per week using a 24-Hour Composite sample. These monitoring frequencies are established by BPJ based on the current LPDES permit. The biomonitoring frequency shall be once per quarter and is consistent with the most recent EPA biomonitoring protocols. The permittee may request a monitoring frequency reduction if there are no lethal or sublethal effects demonstrated at or below the critical dilution after the first year of quarterly testing (See Appendix C).

Parameters:

Flow
TOC
pH
Biomonitoring

2. Internal Outfall 101 - Treated process and laboratory wastewaters and treated sanitary wastewater

Flow shall be monitored continuously using a recorder. Fecal Coliform shall be monitored once per month using a grab sample. Oil and Grease shall be monitored once per week using a grab sample. COD shall be monitored four times per week using a 24-Hour Composite sample. The

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remaining pollutants are to be monitored once per week using a 24-Hour Composite sample. These monitoring frequencies are established by BPJ based on the current LPDES permit.

Flow
BOD₅
TSS
Oil and Grease
COD
Chlorobutadiene
Fecal Coliform

3. Internal Outfall 102 - Hydrostatic test wastewater

Flow shall be monitored once prior to discharge using an estimate. The remaining pollutants are to be monitored once prior to discharge using a grab sample. These monitoring frequencies are established by BPJ based on the current LPDES permit.

Flow
TSS
Oil and Grease
TOC
Benzene
Total BTEX
Total Lead

4. Internal Outfall 201 - Clarifier blowdown

Flow shall be monitored once per week using an estimate and coagulants (clarifying agents) used shall be determined once per month. These monitoring frequencies are established by BPJ based on the current LPDES permit.

Flow
Coagulants

5. Internal Outfalls 401 and 501 - Non-process area stormwater, utility wastewater, and area washdown

Flow shall be monitored once per quarter using an estimate. The remaining pollutants are to be monitored once per quarter using a grab sample when discharging. These monitoring frequencies are established by BPJ based on the current LPDES permit.

Flow
TOC
Oil and Grease
Total Zinc
Total Phenols (*1)

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Toluene (*1)

(*1) These parameters are applicable only at Internal Outfall 401.

6. Outfall 002 - Non-process area stormwater, steam condensate, freeze protection water bleeds, fire water treatment wastewater, and previously monitored hydrostatic test wastewater (Internal Outfall 102)

Flow shall be monitored once per quarter using an estimate. The remaining pollutants are to be monitored once per quarter using a grab sample when discharging. These monitoring frequencies are established by BPJ based on the current LPDES permit.

Flow
 TOC
 Oil and Grease
 pH

7. Outfalls 003, 004, 005, 006, and 007 - Non-process area stormwater

Flow shall be monitored once per quarter using an estimate. The remaining pollutants are to be monitored once per quarter using a grab sample when discharging. These monitoring frequencies are established by BPJ based on the current LPDES permit.

Flow
 TOC
 Oil and Grease
 pH

XI. Compliance History/DMR Review:

- A. LDEQ records were reviewed for the period April 2005 through April 2007. No water enforcement actions were issued during this time period.
- B. A DMR review of the monitoring reports for the period of January 2005 through April 2007 revealed the following effluent violations:

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	<u>Permit Limits</u>	<u>Reported Value</u>
07/05	pH, >60 minutes	001	0 occur/month(max)	1 occur/month
07/05	pH, monthly total	001	446 minutes(max)	5,700 minutes

- C. The most recent inspection was performed on December 19-21, 2006. There were several areas of concern noted in the inspection report:
 - (1) There was a small stormwater drainage area located between Outfalls 002 and 004 that appeared to be unpermitted. [NOTE: In a permit application addendum (dated April 19, 2007), the

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permittee stated that this area flows into the plant ditch system which ultimately drains to Outfall 002, and therefore, does not need to be designated as a separate outfall.]

- (2) The values displayed on the two meters that measure the flow rate at Outfall 001 did not reflect the same flow rate. One flow meter is used as a backup to the other.
- (3) The final pH reading (after calibration) is not being recorded in the log book.

XII. Endangered Species:

The receiving waterbodies, Subsegment Nos. 070301 and 040602 of the Mississippi and Lake Pontchartrain Basins, respectively, have been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon (070301) and the Gulf Sturgeon (040602) which are listed as endangered and threatened species. This draft permit has been submitted to the FWS for review in accordance with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and after consultation with FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon or the Gulf Sturgeon. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as an aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

XIII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XV. Variances:

No requests for variances have been received by this Office.

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XVI. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper(s) of general circulation

Office of Environmental Services Public Notice Mailing List